

Please amend Claims 1, 14 to 28, 31 to 33, 35 to 38, 42, 44, 48 and 50 to read as follows. A marked-up copy of Claims 1, 14 to 28, 31 to 33, 35 to 38, 42, 44, 48 and 50, showing the changes made thereto, is attached. Note that all claims currently pending in this application, including those not presently being amended, have been reproduced below for the Examiner's convenience.

*Sub
E1*

1. (Four Times Amended) An image pickup apparatus having a camera body and a lens unit, comprising:

a ring member for driving the lens unit;

detection means for detecting a change amount of a rotation of said ring member;

*DI
over*

control means, providing in the lens unit, for performing motion/stop control of at least the lens unit along an optical axis in accordance with a detection result by said detection means; and

motion direction setting means, providing in the camera body, for a user to set a desired motion direction of the lens unit relative to the rotation direction of said ring member,

wherein said motion direction setting means comprises (i) character display means, (ii) menu setting means, (iii) display means provided in said camera body and displaying an image picked up by said image pickup apparatus, (iv) a menu function control unit for controlling said character display means in accordance with the operation state of said menu setting means operated by the user, and for displaying a predetermined menu on a display screen of the display means, and (v) setting means for selecting a desired

Paul
setting item among a plurality of items of the predetermined menu displayed on said display means by said menu function control means and setting a condition regarding the motion direction of the lens unit.

2. (Amended) An image pickup apparatus according to claim 1, wherein the lens unit includes a magnification lens, and said motion direction setting means comprises:

an operation switch capable of being operated by a user; and

change means for changing the motion direction of the lens unit relative to the rotation direction of said ring member in accordance with the operation state of said operation switch.

3. (Amended) An image pickup apparatus according to claim 2, wherein the lens unit is made removable relative to the camera body of the image pickup apparatus.

4. (Amended) An image pickup apparatus according to claim 3, wherein said ring member is disposed concentrically about an optical axis of the lens unit.

5. (Amended) An image pickup apparatus according to claim 1, wherein the lens unit includes a magnification lens, and said motion direction setting means comprises:

memory means for storing motion direction information of the lens unit relative to the rotation of said ring member, the motion direction being given by a user; and

change means for changing the motion direction of the lens unit in accordance with the motion direction information stored in said memory means.

6. (Amended) An image pickup apparatus according to claim 5, wherein the lens unit is made removable relative to the camera body of the image pickup apparatus.

7. (Amended) An image pickup apparatus according to claim 6, wherein said ring member is disposed concentrically about an optical axis of the lens unit.

9. (Twice Amended) An image pickup apparatus according to claim 1, wherein the lens unit is made removable relative to the camera body of the image pickup apparatus.

10. (Amended) An image pickup apparatus according to claim 9, wherein said ring member is disposed concentrically about an optical axis of the lens unit.

13. (Amended) An image pickup apparatus according to claim 1, wherein said ring member is disposed concentrically about an optical axis of the lens unit.

Sub
EI
14. (Four Times Amended) An image pickup apparatus having a camera part and a lens part detachably mounted on the camera part, with a magnification lens and a ring member that drives the lens part, comprising:

communication means for performing communication between said camera part and said lens part;

DR
detection means which detects a change amount of a rotation of the ring member for driving the lens part;

camera control means, provided in the camera part, for selecting and determining a response characteristic between an output of said detection means and a motion of the magnification lens, and for transmitting the selected response characteristic to said lens part;

lens control means, provided in said lens part, for receiving information concerning the selected response characteristic transmitted from said camera control means through said communication means, and for controlling the motion of said magnification lens in response to the operation of said ring member in accordance with the selected response characteristic; and

storing means, provided in said camera part, for storing information of the response characteristic so that the selected response characteristic is not volatile even in the case of attaching/removing of said lens part.

Sub
EI
D3
cont
15. (Twice Amended) An image pickup apparatus according to claim 14, wherein the plurality of characteristics of said camera control means includes a first characteristic for controlling a motion amount of the magnification lens per unit rotation of

at least the ring member to be constant and a second characteristic for controlling a motion speed of the magnification lens to be variable in accordance with a rotation speed of the ring member.

D3
cont
16. (Twice Amended) An image pickup apparatus according to claim 14, wherein the plurality of characteristics of said camera control means includes a first characteristic for controlling a motion amount of the magnification lens per unit rotation of at least the ring member to become a first predetermined amount and a second characteristic for controlling a motion amount of the magnification lens per unit rotation of the ring member to become a second predetermined amount different from the first predetermined amount.

D4
cont
17. (Four Times Amended) An image pickup apparatus having a camera part on which a lens part is detachably mountable, the lens part having a ring member that drives the lens part, comprising:
communication means for performing communication between said camera part and the lens part;
detection means which detects a change amount of a rotation of the ring member for driving the lens part;
camera control means, provided in the camera part, for selecting and determining a response characteristic between an output of said detection means and a motion of the magnification lens, and for transmitting the selected response characteristic to the lens part through said communication means so as to set the selected response

DS
characteristic to control means which controls the motion of the magnification lens in response to the operation of the ring member; and

storing means, provided in said camera part, for storing information of the response characteristic so that the selected response characteristic is not volatile even in the case of attaching/removing of the lens part.

DS
18. (Twice Amended) An image pickup apparatus according to claim 17, wherein the plurality of characteristics of said camera control means includes a first characteristic for controlling a motion amount of the magnification lens per unit rotation of at least the ring member to be constant and a second characteristic for controlling a motion speed of the magnification lens to be variable in accordance with a rotation speed of the ring member.

D6
19. (Amended) An image pickup apparatus according to claim 18, wherein the characteristic of said camera control means is changed in accordance with the state of an operation switch capable of being operated upon by a user.

20. (Amended) An image pickup apparatus according to claim 18, wherein the characteristic of said camera control means is changed in accordance with information of the characteristic of said camera control means set by a user.

Devel

21. (Amended) An image pickup apparatus according to claim 18, wherein the characteristic of said camera control means is changed in accordance with a photographing state.

D1

22. (Twice Amended) An image pickup apparatus according to claim 17, wherein the plurality of characteristics of said camera control means includes a first characteristic for controlling a motion amount of the magnification lens per unit rotation of at least the ring member to become a first predetermined amount and a second characteristic for controlling a motion amount of the magnification lens per unit rotation of the ring member to become a second predetermined amount different from the first predetermined amount.

D2

23. (Amended) An image pickup apparatus according to claim 22, wherein the characteristic of said camera control means is changed in accordance with the state of an operation switch capable of being operated upon by a user.

24. (Amended) An image pickup apparatus according to claim 22, wherein the characteristic of said camera control means is changed in accordance with information of the characteristic of said camera control means set by a user.

25. (Amended) An image pickup apparatus according to claim 22, wherein the characteristic of said camera control means is changed in accordance with a photographing state.

29 26. (Four Times Amended) An image pickup apparatus having an image pickup apparatus main body and a lens part, detachably mounted on said main body, which has a magnification lens and a ring member disposed concentrically about a lens optical axis, comprising:

communication means for performing communication between said main body and said lens part;

detection means for detecting a change amount of a rotation of the ring member for driving said lens part;

camera control means, provided in the main body, for selecting and determining a response characteristic between an output of said detection means and a motion of the magnification lens, and for transmitting the selected response characteristic to said lens part;

lens control means, provided in said lens part, for receiving information concerning the selected response characteristic transmitted from said camera control means through said communication means, and for controlling the motion of said magnification lens in response to the operation of said ring member in accordance with the selected response characteristic; and

storing means, provided in said main body, for storing information of the response characteristic transmitted from said lens control means by said communication means so that the selected response characteristic is not volatile even in the case of attaching/removing of said lens part

Sum
Ex
27. (Twice Amended) An image pickup apparatus according to claim 26, wherein the plurality of characteristics of said camera control means includes a first characteristic for controlling a motion amount of the magnification lens per unit rotation of at least the ring member to be constant and a second characteristic for controlling a motion speed of the magnification lens to be variable in accordance with a rotation speed of the ring member.

28. (Twice Amended) An image pickup apparatus according to claim 26, wherein the plurality of characteristics of said camera control means includes a first characteristic for controlling a motion amount of the magnification lens per unit rotation of at least the ring member to become a first predetermined amount and a second characteristic for controlling a motion amount of the magnification lens per unit rotation of the ring member to become a second predetermined amount different from the first predetermined amount.

29. (Cancelled)

30. (Cancelled)

Sub
E
31. (Amended) An image pickup apparatus according to claim 27,
further comprising:

an operation switch capable of being operated upon by a user; and
change means for changing the characteristic of said camera control means
in accordance with a state of said operation switch.

32. (Amended) An image pickup apparatus according to claim 31,
wherein said change means changes the characteristic of said camera control means in
accordance with information of the characteristic of said camera control means set by a
user.

33. (Amended) An image pickup apparatus according to claim 32,
wherein said change means changes the characteristic of said camera control means in
accordance with a photographing state.

34. (Cancelled)

~~Sub
FA~~
35. further comprising:

(Amended) An image pickup apparatus according to claim 28,

an operation switch capable of being operated upon by a user; and

change means for changing the characteristic of said camera control means

in accordance with a state of said operation switch.

36. (Amended) An image pickup apparatus according to claim 35,

wherein said change means changes the characteristic of said camera control means in accordance with information of the characteristic of said control means set by a user.

37. (Amended) An image pickup apparatus according to claim 36,

wherein said change means changes the characteristic of said camera control means in accordance with a photographing state.

40. (Amended) An image pickup apparatus according to claim 14,

wherein the ring member is disposed concentrically about the lens part.

41. (Amended) An image pickup apparatus according to claim 17,

wherein the ring member is disposed concentrically about the lens part.

Sub E

D13

42. (Three Times Amended) An image pickup apparatus comprising:
a ring member disposed concentrically about a lens optical axis of a lens
unit;
detection means for detecting a change amount of rotation of said ring
member;
control means for performing motion/stop control of at least a magnification
lens group along the optical axis in accordance with a detection result by said detection
means; and
inhibition means for inhibiting said control means from performing the stop
control during a predetermined period when said detection means detects a stop of rotation
of the ring member.

43. An image pickup apparatus according to claim 42, wherein the lens
unit is removably and exchangeably mounted on a main body of the image pickup
apparatus.

D14
cont Sub E

44. (Three Times Amended) An image pickup apparatus comprising:
a ring member disposed concentrically about a lens optical axis of a lens
unit;
detection means for detecting a change amount of rotation of said ring
member;

*Dis
cancel*

control means for determining motion direction and speed of a magnification lens group in accordance with an output of said detection means and performing motion/stop control of the magnification lens group along the optical axis; and change means for changing a sensitivity of motion/stop control of said control means relative to a detection result of said detection means so as to start the motion of the magnification lens in accordance with a different detection result of said detection means.

45. An image pickup apparatus according to claim 44, wherein said lens group is removably and exchangeably mounted on a main body of the image pickup apparatus.

47. An image pickup apparatus according to claim 44, wherein said change means changes the motion speed of the magnification lens group relative to an output of said detection means.

*Dis
cancel*

*Sub
E*

48. (Four Times Amended) An image pickup apparatus having a magnification lens group, comprising:
a ring member disposed concentrically about a lens optical axis;
detection means for detecting a change amount of a rotation of said ring member;